

REMARKS

By this amendment, claims 1-18, 21-24, 26, 27, 29-32, 34, 36 and 37 have been amended. No claims has been cancelled or added. Accordingly, claims 1-38 are currently pending in the application, of which claims 1, 15, 29, 34 and 36 are independent claims. Applicants respectfully submit that the above amendments do not add new matter to the application and are fully supported by the specification.

In view of the above Amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Claim Objection

In the Office Action, Claim 22 was objected to for informalities. Particularly, the Examiner stated that claim 22 is mistakenly dependent from claim 15. This objection is respectfully traversed.

Claim 22 has been amended to be dependent from claim 16 which recites “a switching unit” Accordingly, Applicants respectfully request withdrawal of the objection for claim 22.

Rejections Under 35 U.S.C. §102

Claims 1, 7-15, and 21-28 stand rejected under 35 U.S.C. §102(e) as being anticipated by U. S. Patent No. 6,069,620 issued to Nakamura, *et al.* (“Nakamura”). Applicants respectfully traverses this rejection for at least the following reasons.

With respect to claims 1 and 7-14, independent claim 1 has been amended to recite:

“....

a control unit receiving an RGB picture signal and a first timing signal from the external and outputting the RGB picture signal, a second timing signal for displaying the RGB picture signal on a screen, a backlight control signal, and a bias voltage;

...
a common electrode line receiving the bias voltage at an initial operation of the LCD.”

An example of this claimed feature is shown in Fig. 3, in which one of the bias voltage and the common voltage Vcom is selected by the switching element 500 and applied to the common electrode line of the LCD panel 600.

In this regard, Nakamura discloses applying a gate voltage, of which the amplitude is much higher (e.g., about 20 to 30V), to obtain a large potential difference between the gate electrode and the common electrode, thereby rendering the liquid crystal therebetween in a bent orientation state (column 4, lines 33-46). Nakamura merely discloses providing a common electrode driving circuit but does not disclose or suggest providing the bias voltage to the common electrode line at the initial operation of the LCD, as claimed.

For this reason, it is submitted that claim 1 is patentable over Nakamura. Claims 7-14 that are dependent from claim 1 would be also patentable at least for the same reason.

With respect to claims 15 and 21-28, claims 22-28 have been amended to be dependent from claim 16, which has been indicated as patentable over Nakamura. Thus, claims 22-28 would be also patentable at least for the same reason.

Independent claim 15 has been amended and now recite “a common electrode receiving a bias voltage at an initial operation of the LCD”. As previously mentioned, Nakamura fails to disclose or suggest this claimed feature. Thus, it is submitted that claim 15 is patentable over

Nakamura. Claims 21-28 that are dependent from claim 15 would be also patentable at least for the same reason.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §102(e) rejection of claims 1, 7-15, and 21-28.

Rejections Under 35 U.S.C. §103

Claims 2-6, 16-20, and 29-38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nakamura in view of U. S. Patent No. 6,476,792 B2 issued to Hattori, *et al.* (“Hattori”). Applicants respectfully traverse this rejection for at least the following reasons.

Claims 2-6 are dependent from claim 1. As previously mentioned, claim 1 has been amended and is now believed to be patentable over Nakamura because, for example, Nakamura fails to disclose or suggest providing the bias voltage to the common electrode line at the initial operation of the LCD, as recited in claim 1.

Hattori discloses “The transition-driving circuit 13 intermittently applies a voltage pulse with a high voltage such as 15V” (column 11, lines 16-17), but does not disclose or suggest providing the bias voltage to *the common electrode line* at the initial operation of the LCD, as recited in claim 1. Since none of the cited references discloses or suggests this claimed feature, it is submitted that claim 1 is patentable over Nakamura and Hattori. Thus, claims 2-6 that are dependent from claim 1 would be also patentable at least for the same reason.

Claims 16-20 are dependent from claim 15. As previously mentioned, claim 15 has been amended and is now believed to be patentable over Nakamura because, for example, Nakamura fails to disclose or suggest “a common electrode receiving a bias voltage at an initial operation of the LCD”. As mentioned above, Hattori also fails to disclose or suggest this claimed feature.

Since none of the cited references discloses or suggests this claimed feature, claim 15 is patentable over the cited references. Claims 16-20 that are dependent from claim 15 would be also patentable at least for the same reasons.

With respect to claims 29-33, amended independent claim 29 recites:

- “ ...
(a) inducing transition into bend state by ... applying an external bias voltage separately to a common electrode of the LCD panel;
(b) interrupting the external bias voltage when a predetermined time elapses and applying a common electrode voltage to the common electrode; and
...”

As previously mentioned, none of the cited references discloses or suggests these claimed features. Thus, it is submitted that claim 29 is patentable over them. Claims 30-33 that are dependent from claim 29 would be also patentable at least for the same reasons.

With respect to claims 34 and 35, amended independent claim 34 recites:

- “ ..
(b) ... *selecting the external bias voltage to be applied to a common electrode line of the LCD panel;*
(c) applying the common electrode voltage replacing the external bias voltage to the common electrode;
(d) when a predetermined period elapses, *interrupting the application of the external bias voltage, ... and applying the common electrode voltage to the common electrode line ...*”

As previously mentioned, these claimed features are not disclosed or suggested in the cited references. Thus, it is submitted that claim 34 and its dependent claim 35 are patentable over them.

With respect to claims 36-38, amended independent claim 36 recites:

“ ...

- (b) controlling the external bias voltage and the common electrode voltage to be *alternatively applied to a common electrode line* the LCD panel several times;
- (c) applying the common electrode voltage replacing the external bias voltage to the common electrode line;
- ...”

As previously mentioned, Nakamura and Hattori do not disclose or suggest these claimed features. Thus, it is submitted that claim 36 and its dependent claims 37 and 38 are patentable over them.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. §103(a) rejection of claims 2-6, 16-20, and 29-38.

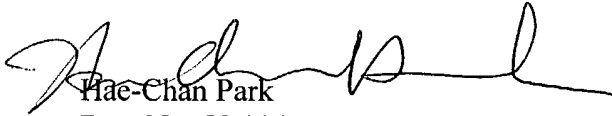
CONCLUSION

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,


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Date: November 24, 2004

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